10

15

WHAT IS CLAIMED IS:

1. A time slot assignment method in a mobile communication system employing a TDMA and TDD scheme that assigns time slots, which are formed by time dividing a frame of a frequency band, to uplink channels and downlink channels, said time slot assignment method in a mobile communication system comprising the steps of:

giving uplink or downlink priorities to all the time slots in the frame;

receiving a time slot assignment request from at least one of the uplink channels and the downlink channels; and

assigning the time slots in the frame in response to the time slot assignment request received at the receiving step, in accordance with the priorities given at the giving step.

- 20 2. The time slot assignment method as claimed in claim 1, wherein the giving step gives the same priority to a plurality of the time slots included in the frame.
- 25 3. The time slot assignment method as claimed in claim 1, wherein the giving step stores the given priorities in a memory means, and the assigning step

15

20

25

assigns the time slots in the frame in accordance with the priorities stored in said memory means.

4. A time slot assignment apparatus in a mobile 5 communication system employing a TDMA and TDD scheme that assigns time slots, which are formed by time dividing a frame of a frequency band, to uplink channels and downlink channels, said time slot assignment apparatus in a mobile communication system 10 comprising:

memory means for storing uplink or downlink priorities of all the time slots in the frame:

receiving means for receiving a time slot assignment request from at least one of the uplink channels and the downlink channels; and

assignment means for assigning the time slots in the frame in response to the time slot assignment request received by said receiving means, in accordance with the priorities store in said memory means.

- 5. The time slot assignment apparatus as claimed in claim 4, wherein said memory means gives the same priority to a plurality of the time slots included in the frame.
- The time slot assignment apparatus as claimed in

claim 4, wherein said assignment means decides the priorities of the time slots to be assigned in accordance with the priorities stored in said memory means.